

## **Macroeconomic Assumptions**

This section presents the macroeconomic assumptions underlying the USDA baseline. Factors affecting the domestic macroeconomic outlook and assumptions are presented first, followed by a discussion of the conditions determining the international outlook. The macroeconomic assumptions presented this year reflect, to a large extent, the evolving Asia financial crisis, especially in the first half of the baseline. The more recent financial crisis and economic slowdown in Russia is also accounted for in the assumptions, but has generally smaller impacts on global macroeconomic and agricultural trade conditions.

The Asia crisis has proven to be far more severe than initial assessments, and is now expected to have significant intermediate and longer-term implications. While the U.S. macroeconomy is only moderately affected by the crisis, U.S. agriculture, as a trade dependent sector, is very sensitive to conditions in the international economy. The Asia crisis has had impacts on economic growth, trade policies, trade patterns, interest rates, and currency exchange rates in many countries. These changes have far-reaching consequences for U.S. agriculture, including reducing foreign demand for U.S. farm products, U.S. agricultural export earnings, farm income, and farm asset values.

### **Domestic Macroeconomic Projections**

The U.S. macroeconomic outlook is affected by domestic policies, as well as by global economic conditions that are transmitted to the U.S. economy through changes in trade and financial markets. The Asia crisis has had moderate, mixed effects on the U.S. macroeconomy.

- C In 1998, the Asian financial crisis slowed world growth and triggered a flight to quality financial assets, which in turn bid up U.S. Treasury bond prices, lowered U.S. interest rates, and boosted the value of the dollar.
- C The strong dollar and tepid world growth increased the U.S. trade deficit by lowering exports and raising imports, dampening U.S. aggregate demand and GDP growth. However, the trade deficit's drag on aggregate demand was offset by low interest rates which boosted spending on housing, consumer durables, and business equipment. Additionally, with a high level of domestic consumer confidence spurring consumer spending, U.S. economic growth in 1998 was a strong 3.5 percent.
- C The strong dollar and weak world growth caused industrial commodity prices to fall, lowering inflation by about 0.5 percentage points despite strong wage gains.

### **Key Assumptions**

In the near term, 1999 and 2000, the Asia crisis is expected to contribute to slower U.S. real GDP growth. Interest rates are expected to remain relatively low during this period. By 2000 and 2001, oil prices are assumed to begin to increase sharply from 1998 lows, adding to U.S. inflation. World economic growth is assumed to begin moving up by 2000, pushing U.S. growth and inflation toward trend levels.

Beyond 2001, the impacts of the financial crisis on the U.S. economy diminish and demand strengthens. With the economy operating close to full employment, GDP growth is driven by the factors that increase U.S. productive capacity. The most important of these are growth of the labor force and the productivity of U.S. labor. While labor force growth is below trend, investment and innovation are increasing the trend growth of U.S. productivity. A number of factors are assumed that shape the growth of demand and productive capacity:

- C Fiscal policy results in small structural surpluses for most of the projection horizon.
- C Monetary policy is relatively stringent while accommodating fiscal surpluses.
- C Real oil prices rise 1.1 percent annually as reflected in the Energy Information Administration's "Annual Long Term Outlook" of January 1998.
- C Labor productivity gains average 1.3 percent from 2003 to 2008, reflecting capital investment, low material price inflation, and favorable real interest rates.
- C Employment growth averages 1.2 percent a year through 2008, broadly consistent with Bureau of Labor Statistics projections, welfare reform, and expected immigration.
- C World GDP growth is expected to average about 3 percent in 2003-2008.
- C The expected continuation of a strong dollar implies persistent U.S. trade deficits for the baseline forecast horizon.

As a result, U.S. GDP growth is expected to average 2.5 percent in 2003-2008, compared with 2.1 percent growth during 1991-1996. More widespread rises in industrial and raw material prices than seen currently, and tight labor markets, will result in short-term interest rates about 70 basis points above recent trends to keep inflation under control. Inflation is expected to be at 3.0 percent for 2003-2008.

### **International Macroeconomic Assumptions**

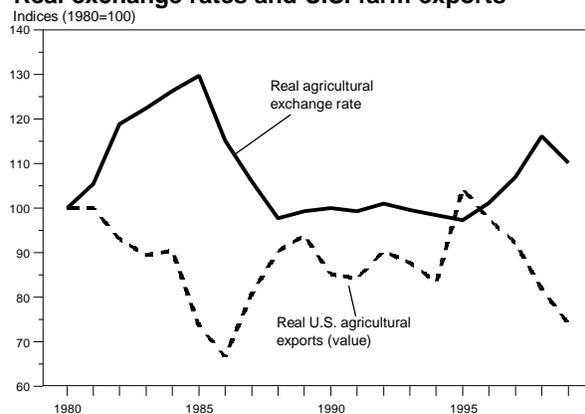
The outlook for the world economy over the next 10 years is strongly influenced by the ongoing crisis and structural adjustments in Asia, and by the secondary impacts of that crisis on the rest of the world. Developments in Asia, particularly Japan, are key determinants of the global macroeconomic outcome. The assumptions indicate a dichotomy between those countries that have gone through structural adjustments over the past 10 years, including the United States, EU, and Central and Eastern Europe, and other countries, primarily in Asia, that have recently outgrown their institutional foundations and are experiencing crisis and adjustment.

## Exchange Rate Movements and Agricultural Trade

Exchange rate shifts in importing and competing countries are important determinants of U.S. agricultural exports. A strong U.S. dollar often coincides with periods of poor U.S. export performance, while a weaker dollar often coincides with export growth (see fig. 1). The Asia crisis, by weakening confidence in Asian currencies and shifting capital flows away from Asia and toward the United States, has contributed to appreciation of the U.S. dollar against many foreign currencies since mid-1997. Assumptions regarding future exchange rate movements are key to the baseline projections for agricultural trade.

Exchange rate movements affect U.S. exports by changing the cost of traded goods and, hence, the price incentives to import or export. In Thailand, for example, the abrupt decline in the value of the baht led to a drop in farm imports, including wheat, corn, and soybeans, as consumers adjusted to the sharply higher cost of imports in baht terms. At the same time, the volume of Thailand's farm exports, including rice and poultry, increased as domestic demand declined and producers responded to higher baht export prices. In Korea, depreciation of the won during the crisis contributed to lower agricultural imports. However, Korea's relatively high-income consumers are less responsive to price changes than in Thailand. A key development in Korea has been an increase in pork production by local producers.

Figure 1  
Real exchange rates and U.S. farm exports



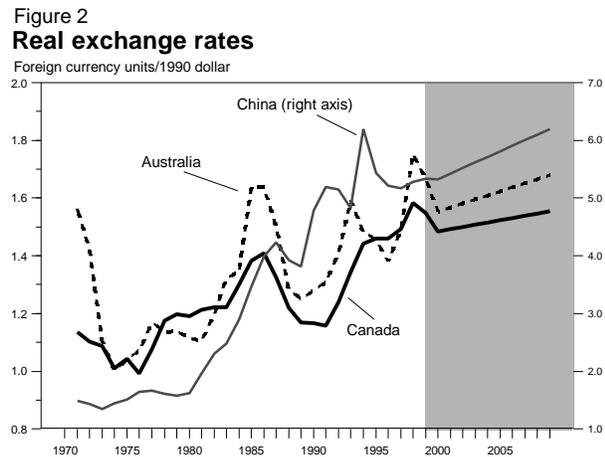
Financial flows underlie the Asian exchange rate movements, with large capital inflows to the region switching to large net outflows during the crisis. A large share of this shift moved to investments in the United States that were perceived to be less risky, leading to further appreciation of the dollar. Future movements in Asian exchange rates are difficult to predict because they will hinge on the pace of financial reform and the return of investor confidence in the region. The appropriate policy mix remains uncertain, with some countries opting for open capital markets with stronger banking regulation, and others, primarily Malaysia, for controls on capital flows.

**The short term.** The initial adjustments of Asian exchange rates during the crisis were probably more than required in the long term. The Thai baht, for example, has recovered significantly from its initial 50-percent fall. The Indonesian rupiah has also rebounded significantly following its initial 85-percent depreciation, with similar patterns in most of the crisis countries. Although it is difficult to predict exchange rate movements over the next few years, the baseline assumes a rebound for most Asian currencies during the first 2-3 years of the projections (1999-2001).

-- continued

## Exchange Rate Movements and Agricultural Trade – continued

**The longer term.** Predicting long-term exchange rate changes is equally difficult, particularly with the shocks to the global economy due to the Asian crisis. Foreign-country exchange rate assumptions are based on long-term historical trends in real exchange rates versus the U.S. dollar. These longer-term trends may differ somewhat from the near-term assumptions. Canada, Australia, and China are key examples (see fig. 2). In all three cases, real appreciation is anticipated over the first few years of the baseline, but the longer-term assumption is to remain consistent with historical trends of real depreciation against the U.S. dollar. These exchange rate assumptions will tend to maintain the competitiveness of Australian and Canadian farm exports, while constraining growth in China's net agricultural imports during the projection period.



The assumed global macroeconomic outlook is distinctly different in the near term and the longer term. Near- and medium-term assumptions are dominated by the Asia crisis and subsequent recovery. This period includes 1 to 3 years of negative growth in crisis countries, followed by a return to moderately positive economic growth. In the longer term, the last 5 years of the baseline assume that structural reforms lead to stronger and more stable economic growth. Longer-term growth in the crisis-affected Asian countries is, however, generally assumed to be lower than pre-crisis expectations.

Behind current economic conditions and the outlook for Asia is the rapid and sharp turnaround of capital flows between 1996 and 1998. The consequence of the change in financial inflows was significant depreciation of currencies in crisis countries, with a resulting reduction in import demand. The financial crisis has severely curtailed credit, limited investment spending and, consequently, reduced productivity growth. Past failures of the banking and financial systems that led to ineffective investments and a high incidence of nonperforming loans will continue to constrain the availability of capital. Thus, in addition to the substantial short-term curtailment of demand in crisis-affected countries, there will be new constraints on the recovery of their longer-term economic growth.

There is a significant dichotomy between the outlook for crisis countries and for the OECD countries (less Japan). In contrast to the Third World debt crisis of the 1980s, which contributed to recessions and high inflation in both developed and developing countries, the impacts of the current crisis are expected to remain concentrated in developing and transition countries. Following structural adjustments during the 1980s and 1990s, the U.S. and European economies

are fundamentally sound and are expected to endure the crisis with limited impacts. The developed economies, including the United States, are projected to grow at higher rates than in the 1991-1996 period, 2.4 percent compared with 1.9 percent. In contrast, the fundamental weakness in the crisis countries implies the need for significant structural adjustments in banking and finance, as well as in other sectors of the affected countries. These adjustments will take at least 5 years, with economic impacts that extend further and likely reduce growth prospects for the longer term.

Despite slower long-term growth in the crisis-affected countries, world real GDP is projected to grow by about 2.9 percent annually through 2008, compared with 2.3 percent during 1991-1996. Stronger growth in the developed countries, and in developing and transition countries that are not affected by the crisis, account for this rise in global economic gains. Asian growth is projected at 4.8 percent for 1997-2002, increasing to 6.1 percent between 2003-08. While Asian growth is expected to strengthen during 2003-08, the assumed rate of growth is 2 percentage points below the region's 1991-96 average annual growth rate of 8.1 percent.

Reduced growth in Asia represents a significant narrowing of the historical growth differential between Asia and Latin America. Latin American growth is projected to increase to an average of 4.1 percent during 1997-2002 and 4.3 percent during 2003-08, compared with 3.1 percent during 1991-96. Relatively strong growth is also assumed in North Africa, the Middle East, and the transition economies of Eastern Europe. In the former Soviet Union, however, the current economic crisis in Russia is expected to result in economic contraction through 2000, and only very slow growth thereafter.

### **Developed Countries**

The developed countries are relatively unaffected by the Asia crisis. The structural adjustments undertaken throughout the second part of the 1980s and early 1990s have created a solid foundation for future growth. Low inflation and interest rates characterize the outlook, along with government budgets, except in Japan, that will be largely balanced.

**European Union--**The coming monetary union between qualified EU members and introduction of a single currency will enhance the efficiency of cross-border trade and investment within Western Europe. More uniform fiscal policies, as well as disciplined monetary policy guided by the German-based central bank, should lead to more stable growth prospects early in the next century. The European economy is projected to expand by 2.6 percent, on average, between 1997-2002 and 2.2 percent from 2003 to 2008.

Inflation should be well controlled as a strong unified currency, the Euro, acts as an anchor for price stability. Fiscal consolidation by member countries will reduce inflationary expectations and lower long-term interest rates. The Euro is projected to appreciate in real terms against the U.S. dollar as the currency becomes widely used for world trade and for international reserves.

**Japan--**The Japanese economy continues to face significant structural problems. Approximately \$1 trillion of nonperforming loans are stifling the banking system. It is assumed that necessary structural adjustments will be undertaken, allowing modest growth to resume in the medium

term. Real GDP growth is assumed to recover and average 2.3 percent from 2003 to 2008, consistent with the overall growth outlook for developed economies, and slightly below what is projected for the United States. The pace of policy reform and economic recovery in Japan will be a key factor in the rebound of neighboring Asian economies.

Domestic demand in Japan is expected to revive as Japanese banks slowly strengthen their capital base after writing off significant bad loans, and as the property and stock markets rebound. Manufacturing production should lead the way toward more vigorous economic activity, led prominently by exports of high-value products. In the longer run, recovery of Southeast Asian economies will provide additional demand for Japan's capital exports and manufactured goods. The yen is expected to appreciate significantly during 1999 to 2002 as the Japanese economy revives and then return to its long-term trend of moderate appreciation against the dollar.

**Canada**--Canada's growth pattern in the 1990s has roughly tracked the U.S. GDP path because of the close integration of trade and investment between the neighbors. NAFTA has reinforced the growing integration of the two economies. The overhaul of Canada's welfare system has shifted the budget from deficit to surplus and is also a key to the relatively bright future growth prospects. Baseline macroeconomic assumptions call for Canada's economy to grow somewhat faster than the U.S. economy over the next 10 years.

A competitive Canadian dollar, including steady depreciation against the U.S. dollar since 1990, together with lower inflation relative to the United States, has helped boost Canadian price competitiveness. Modest real depreciation of the Canadian dollar against the U.S. dollar is expected to continue to maintain Canada's competitiveness over the longer term.

### **Transition Economies**

Countries that are currently ahead in the transformation from centrally planned to market economies are now experiencing higher growth than those that have reformed more slowly. The principal measure of the success of reform, which also coincides with higher GDP growth, is the degree of integration into the global economy--trade flows, investment flows, and currency convertibility. For the baseline, growth is expected to remain strongest among the early reforming countries of Central and Eastern Europe, including Poland and Hungary. Growth is expected to remain weak among the transition economies that are reforming more slowly, including the former Soviet Union.

**Central and Eastern Europe**--Several of the region's larger economies, including Poland, Hungary, and the Czech Republic, are expected to show significant growth, averaging 4.3 percent during 1997 to 2002, after undertaking market reforms and increasing openness to trade and competition. A reorientation of trade from the former Soviet Union to the West has contributed to their strong performance. In some other countries, however, such as Bulgaria and Romania, reforms have lagged and growth is expected to remain relatively slow. Overall, the region's growth is expected to average more than 4 percent annually over the baseline, significantly higher than during the late 1980s and early 1990s.

**The Former Soviet Union**--After almost a decade of economic retrenchments and setbacks, the countries of the former Soviet Union are once again faced with substantial negative growth in the near term and only modest prospects for growth in the longer term. In Russia, real GDP is projected to continue to decline further in 1999. It is difficult to assess how the current crisis will be resolved, but restoration of positive growth will likely take at least several years. Overall GDP growth for the region is assumed to recover modestly and average about 2.2 percent from 2003 to 2008.

## **Developing Countries**

The crisis in Asia will affect growth in developing countries, mostly by restricting financial flows into these countries. This implies a slightly lower growth rate, averaging under 5 percent annually in the baseline, compared to 5.4 percent during 1991-1996. Assumed real GDP growth rates for the baseline are more balanced across developing regions than in the past, when growth rates in developing Asia have typically been substantially higher than other developing regions. In the current long term outlook, growth rates in developing Asia are somewhat lower than performance during the 1980s and early 1990s, while growth rates in Latin America, Africa, and the Middle East are somewhat higher.

**Mexico**--The Mexican economy has recovered from a deep recession in 1995. While domestic real wages and consumption have not fully recovered, business investment and export growth are healthy again. Capital inflows and expanded trade with the United States because of NAFTA have boosted Mexico's production and export capacity, and a strong U.S. economy bolsters Mexico's prospects. Medium-term economic growth is expected to average a strong 5.2 percent, followed by more sustainable growth of 4.5 percent in the longer term.

**China**--While China's recent growth has consistently been the strongest in Asia, it is expected to level off from double digits in the early 1990s to a more sustainable annual pace of 7 to 8 percent in the next decade. With population growth of less than 1 percent a year, per capita GDP gains will remain impressive at more than 6 percent annually.

China is expected to continue its process of gradual market-oriented structural reform with a minimum of disruption. However, past high growth in real output is expected to be slowed by adjustment problems of unemployment associated with privatization of state-owned enterprises, and by competition from foreign firms. Competition with other developing countries for lower-value export markets should remain keen. Although China is not expected to devalue its currency in the near term while neighboring economies are in turmoil, China's currency is assumed to continue to depreciate gradually in real terms later in the baseline.

**East and Southeast Asia**--The Asia crisis has a major impact on this region both in the short and longer term. Output growth in East and Southeast Asia is assumed to slow substantially over the next 5 years, then recover slightly in the following 5 years. Overall growth in the region (excluding China) is assumed to average 4.1 percent annually over the baseline, compared with 7.4 percent during 1991-1996. In the near term, growth is slowed by currency devaluation and deflation of asset prices in the region's major economies, including Korea, Taiwan, Thailand, Indonesia, and Malaysia.

Export growth, buoyed by increased exchange rate competitiveness, and domestic demand recovery will be keys to the anticipated longer-term recovery in the region. Prospects for a rapid recovery in the region are dimmed by the fact that about 13 percent of developing Asia's exports are destined for Japan, and another 40 percent for other Asian markets, where growth is now affected by the crisis. Recovery also will be constrained by the fact that intra-regional investment, particularly from Japan, accounts for a large share of trans-border investment in the region. As a result, domestic savings performance and expansion of extra-regional trade will be important factors in the pace of recovery.

**South Asia**--The South Asian economies are expected to sustain relatively strong growth, averaging near that of East and Southeast Asia over the longer term. India, which produces 82 percent of the area's output, is expected to achieve average annual growth of about 5.5 percent annually. Like China, India's large and increasingly liberalized domestic market will provide the bulk of the impetus for expansion. Gains in South Asia's other large economies, Pakistan and Bangladesh, are expected to be somewhat slower than in India.

**Middle East**--Countries in this key agricultural importing region are, on average, expected to achieve stronger growth during the baseline than during the 1980s and 1990s. The region's economic prospects are, however, closely linked to movements in world energy and petroleum prices. Although global petroleum prices have weakened recently due to plentiful supplies and weakened demand stemming from the Asia crisis, the baseline assumptions call for strengthening oil prices over the longer term. Regional growth also will depend on developments in Iran and Iraq, both large economies that have performed poorly in recent years. Prospects for both countries remain uncertain, but they are assumed to maintain moderate growth rates during the baseline, somewhat higher than recent average performance. Overall, the Middle East economies are expected to expand by about 3.8 percent annually during the projection period.

**Africa**--In Africa, growth prospects hinge on the performance of Egypt, Nigeria, and South Africa, the continent's largest economies. Growth in North Africa is expected to be bolstered by the improved performance of the economies of Egypt, Morocco, and Tunisia, in large part due to the success of liberalizing reforms to both domestic and trade policies. In Algeria, however, growth is expected to remain sluggish because of the effects of ongoing internal strife.

Relatively slow growth is assumed for the Sub-Saharan Africa region, and for South Africa. Although some Sub-Saharan economies are now achieving higher and more stable growth than in the past, significant improvements are not anticipated in many countries in the region. Nigeria, the region's largest economy, will likely remain unable to attract foreign investment and exploit its abundant oil resources because of continued political instability, corruption, and a largely unskilled labor force. Ongoing political troubles in countries such as the Sudan and Congo are also expected to be a drag on growth in Sub-Saharan Africa. In South Africa, a large labor force of unskilled workers, high interest rates because of budget problems, and general social discontent will pose risks for investors and limit growth.

**South America**--Although near-term economic growth in the region is assumed to be slowed somewhat by financial and trade impacts of the Asia crisis, virtually all of the region's

economies are expected to register stronger long-term growth during the next decade than in the recent past. This stronger growth projected for the area is led by the MERCOSUR core countries of Brazil and Argentina. Freer trade will further integrate these countries' economies as they gear up for eventual hemispheric free trade with NAFTA countries. Behind the strong growth is reduced debt, less government intervention in the private sector, growing intra-regional trade, and heavier foreign direct investment. The recent economic slowdown in Brazil is assumed to be short-lived and to not spread to neighboring countries. The January 1999 devaluation of the Brazilian currency occurred after the baseline was completed and, therefore, is not incorporated in the projections.

The past environment of overvalued currencies, large trade and fiscal deficits, and low internal investment due to low savings is not expected to return. New economic policies now generate less inflation and more competitive industries as import barriers fall. Still, however, savings as a share of GDP are projected to rise only slowly and levels will remain substantially lower than in East and Southeast Asia. Because of this, the region's general dependence on foreign capital introduces the risk of capital flight in response to external shocks, such as higher U.S. interest rates.

### **World Population Growth**

Baseline population assumptions were updated in August 1998, using data obtained from the U.S. Bureau of the Census and the United Nations.

Africa and the Middle East are projected to continue to have the fastest growing population over the next decade, averaging 2.3 to 2.5 percent a year. The next fastest regions are Asia and Latin America, averaging 1.3 to 1.4 percent a year. These assumptions indicate that per capita GDP gains in Asia and Latin America will outpace those of Africa and the Middle East by a bigger margin than their GDP growth differentials.

Populations in developed and transition economies are projected to grow by less than 0.5 percent annually, with the slowest rates in Russia, Eastern Europe, Japan, and the European Union. Overall, the number of people in the world will increase at a declining rate, and per capita GDP will rise by an average 2 percent per year. By 2008, the world's population is projected to total nearly 6.7 billion, with over 80 percent living in developing countries.

Table 1. Domestic macroeconomic baseline assumptions

Item	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>GDP, billion dollars</b>												
Nominal	8,111	8,521	8,935	9,369	9,910	10,453	11,025	11,628	12,264	12,936	13,643	14,390
Real 1992 chained dollars	7,270	7,524	7,698	7,859	8,063	8,265	8,472	8,684	8,901	9,123	9,351	9,585
percent change	3.9	3.5	2.3	2.1	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Disposable personal income</b>												
Nominal (billions)	5,795	6,057	6,376	6,653	7,052	7,452	7,868	8,298	8,752	9,231	9,736	10,259
percent change	4.7	4.5	5.3	4.3	6.0	5.7	5.6	5.5	5.5	5.5	5.5	5.4
Nominal per capita, dollars	21,633	22,401	23,374	24,178	25,405	26,616	27,863	29,142	30,482	31,886	33,356	34,859
percent change	3.8	3.6	4.3	3.4	5.1	4.8	4.7	4.6	4.6	4.6	4.6	4.5
Real (billion 1992 chained)	5,183	5,349	5,493	5,581	5,738	5,892	6,046	6,197	6,352	6,511	6,673	6,833
percent change	2.8	3.2	2.7	1.6	2.8	2.7	2.6	2.5	2.5	2.5	2.5	2.4
Real per capita, 92 dollars	19,349	19,782	20,137	20,282	20,670	21,046	21,410	21,762	22,122	22,489	22,862	23,219
percent change	1.9	2.2	1.8	0.7	1.9	1.8	1.7	1.6	1.7	1.7	1.7	1.6
<b>Consumer spending</b>												
Real (billion 1992 chained)	4,914	5,125	5,253	5,368	5,510	5,646	5,788	5,932	6,080	6,232	6,387	6,547
percent change	3.4	4.3	2.5	2.2	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Inflation measures</b>												
GDP price index, chained	111.6	113.2	116.1	119.2	122.9	126.5	130.1	133.9	137.8	141.8	145.9	150.1
percent change	1.9	1.5	2.5	2.7	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9
CPI-U, 82-84=100	160.5	163.4	167.8	172.5	178.0	183.4	188.9	194.5	200.4	206.4	212.6	218.9
percent change	2.3	1.8	2.7	2.8	3.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0
PPI, finished goods 82=100	131.8	130.5	133.4	136.8	140.4	144.0	147.6	151.4	155.2	159.2	163.2	167.3
percent change	0.4	-1.0	2.2	2.5	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5
PPI, crude goods 82=100	111.2	99.8	100.3	101.3	102.3	103.8	105.4	107.5	109.7	112.4	115.2	118.1
percent change	-2.2	-10.3	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5
<b>Crude oil price, \$/barrel</b>												
Refiner acq. cost, imports	18.6	12.6	13.7	16.4	19.4	20.1	21.0	21.8	22.7	23.6	24.5	25.5
percent change	-9.9	-32.1	8.2	20.2	18.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Real cost, 92 chained dollars	16.6	11.1	11.8	13.8	15.8	15.9	16.1	16.3	16.5	16.6	16.8	17.0
percent change	-11.5	-33.1	5.6	17.0	14.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1
<b>Labor compensation per hour nonfarm business, 92=100</b>												
	114.5	119.8	124.2	129.0	134.4	139.9	145.6	151.9	158.4	165.2	172.3	179.6
percent change	3.7	4.6	3.7	3.8	4.2	4.1	4.1	4.3	4.3	4.3	4.3	4.2
<b>Interest rates, percent</b>												
3 month T-bills	5.1	5.0	5.2	5.5	5.3	5.5	5.5	5.7	5.8	5.8	5.8	5.8
6 month commercial paper	5.6	5.5	5.7	6.0	5.8	6.0	6.0	6.2	6.3	6.3	6.3	6.3
Bank prime rate	8.5	8.5	8.8	8.6	8.3	8.3	8.3	8.4	8.5	8.5	8.5	8.5
Treasury bonds (10-year)	6.4	5.6	5.9	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Moody's Aaa bonds	7.3	6.6	6.9	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
<b>Civilian unemployment</b>												
rate, percent	5.0	4.6	4.8	5.3	5.5	5.3	5.0	5.1	5.1	5.1	5.3	5.6
Nonfarm payroll emp., millions	122.7	125.9	127.0	128.6	130.1	131.8	133.4	135.0	136.6	138.2	139.9	141.4
percent change	2.6	2.6	0.9	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.1
<b>Total population, million</b>												
	267.9	270.4	272.8	275.2	277.6	280.0	282.4	284.7	287.1	289.5	291.9	294.3
percent change	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8

Note: All real variables measured in chained 1992 dollars; nominal variables in current dollars. The macroeconomic assumptions were completed in September 1998.

Table 2. Foreign real GDP baseline growth assumptions

Region/country	1996	1997	1998	1999	2000	2001	2002	Average		
								1991-1996	1997-2002	2003-2008
	<i>Percent change</i>									
World	2.8	3.2	2.3	2.5	2.8	2.9	2.9	2.3	2.8	3.0
less U.S.	3.0	3.0	1.9	2.6	3.0	3.1	3.1	2.3	2.8	3.2
Developed economies	2.1	2.8	2.3	2.3	2.3	2.4	2.3	1.9	2.4	2.3
United States	2.4	3.9	3.5	2.3	2.1	2.6	2.5	2.1	2.8	2.5
Canada	1.5	3.6	3.2	2.7	2.6	2.7	2.8	1.5	2.9	2.8
Japan	3.6	0.9	-2.0	0.5	1.8	2.1	2.3	1.8	0.9	2.3
Australia	4.0	3.3	2.8	2.7	2.3	2.5	2.5	3.5	2.7	2.5
European Union-15	1.3	2.6	2.9	2.8	2.5	2.3	2.2	1.8	2.6	2.2
Transition economies	-1.1	1.9	-1.0	-0.5	1.4	2.2	2.6	-6.8	1.1	2.9
Eastern Europe	2.0	3.8	4.1	4.4	4.4	4.6	4.5	-0.1	4.3	4.0
Czech Republic	4.1	1.0	2.1	3.0	3.6	3.9	3.9	-1.5	2.9	4.2
Hungary	1.3	4.1	5.0	5.0	5.0	5.0	4.6	-0.8	4.8	4.2
Poland	5.9	6.9	6.0	6.0	5.5	5.5	5.4	2.8	5.9	4.4
Former Soviet Union	-2.3	1.1	-3.1	-2.6	0.0	1.0	1.6	-8.7	-0.3	2.2
Russia	-4.9	0.4	-8.0	-7.0	-2.0	0.0	1.5	-8.3	-2.5	2.9
Ukraine	-10.0	-3.2	-3.0	-5.0	-1.0	0.0	1.0	-13.0	-1.9	2.8
Other	1.8	2.5	1.5	1.5	1.6	1.8	1.8	-8.0	1.8	1.7
Developing countries	6.1	5.0	2.4	3.7	4.5	4.9	5.0	5.4	4.3	5.0
Asia	7.6	6.2	1.6	3.9	5.4	5.9	6.1	8.1	4.8	6.1
East & Southeast Asia	7.8	6.5	0.7	3.6	5.4	6.1	6.3	9.0	4.8	6.4
China	9.9	8.8	6.6	7.0	7.5	7.8	7.8	11.9	7.6	7.7
Hong Kong	4.7	5.3	-2.0	2.3	4.9	4.8	4.8	5.4	3.4	4.7
Korea	7.1	5.5	-4.0	0.5	3.5	4.5	5.0	7.5	2.5	5.5
Taiwan	5.5	6.8	4.7	5.0	5.5	5.6	5.6	8.4	5.5	5.6
Indonesia	7.6	4.7	-15.0	-4.0	1.5	3.0	4.0	7.8	-1.0	4.5
Malaysia	8.0	7.8	-2.6	-1.0	3.0	4.5	5.0	8.6	2.8	5.0
Philippines	5.7	5.3	-1.1	1.5	4.0	5.0	5.0	2.9	3.3	5.0
Thailand	6.4	-0.4	-4.1	-1.0	3.0	5.0	5.0	8.2	1.3	5.0
Vietnam	9.3	8.5	7.0	7.4	8.5	8.5	8.5	8.4	8.1	8.5
South Asia	7.0	5.3	4.8	5.3	5.4	5.4	5.4	5.4	5.3	5.4
India	7.5	5.5	4.9	5.5	5.5	5.5	5.5	5.5	5.4	5.5
Pakistan	4.6	3.8	4.2	4.4	4.8	4.8	4.8	4.8	4.5	4.8
Bangladesh	5.3	5.4	4.9	4.3	4.3	4.3	4.3	4.3	4.6	4.3
Latin America	3.6	4.7	2.8	3.9	4.3	4.3	4.3	3.1	4.1	4.3
Caribbean & Central America	2.7	3.0	3.4	3.6	3.7	3.7	3.6	3.0	3.5	3.4
Mexico	5.9	7.0	4.6	5.0	5.0	5.0	4.8	2.2	5.2	4.5
South America	3.1	4.2	2.2	3.6	4.1	4.1	4.3	3.5	3.7	4.3
Argentina	4.4	8.4	4.1	4.5	4.5	4.5	4.7	5.1	5.1	4.7
Brazil	2.9	3.0	1.0	3.0	4.0	4.0	4.2	2.6	3.2	4.2
Other	2.4	3.8	3.5	4.0	4.0	4.0	4.0	4.5	3.9	4.0
Middle East	6.4	4.0	3.3	3.5	3.7	4.0	4.0	4.5	3.7	3.9
Iran	4.9	3.2	2.8	3.0	3.4	3.8	3.8	4.7	3.3	3.8
Iraq	42.0	10.0	1.8	2.6	3.7	4.4	4.4	2.0	4.5	4.4
Saudi Arabia	-0.1	2.7	2.1	1.9	2.8	3.2	3.2	1.9	2.7	3.2
Turkey	6.7	7.2	5.0	5.2	4.5	4.5	4.4	3.9	5.1	4.4
Other	9.5	3.4	4.2	4.2	4.2	4.3	4.4	7.5	4.1	4.1
Africa	5.2	2.4	3.3	3.5	3.3	3.4	3.4	2.4	3.2	3.5
North Africa	5.7	2.6	4.5	4.4	4.2	4.1	4.1	2.5	4.0	4.1
Algeria	3.8	1.3	4.0	3.6	3.1	2.8	2.8	0.9	2.9	2.8
Egypt	5.0	4.9	4.5	4.5	4.4	4.4	4.4	3.6	4.5	4.4
Morocco	11.5	-2.2	4.8	5.0	5.0	5.0	5.1	3.1	3.8	5.1
Tunisia	7.0	5.6	5.9	6.1	6.0	5.6	5.6	4.4	5.8	5.6
Sub-Saharan Africa	5.7	2.7	2.4	2.7	2.7	2.7	2.8	2.9	2.7	2.8
South Africa	3.3	1.7	3.0	3.4	3.1	3.5	3.5	1.2	3.0	3.5

Table 3. Baseline population growth assumptions

Region/country	1996	1997	1998	1999	2000	2001	2002	Average		
								1991-1996	1997-2002	2003-2008
	<i>Percent change</i>									
World	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.5	1.3	1.2
less U.S.	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.5	1.4	1.3
Developed Economies	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.4	0.3
United States	0.9	0.9	0.9	0.9	0.8	0.8	0.8	1.0	0.9	0.8
Canada	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.3	1.1	0.9
Japan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1
Australia	1.0	1.0	0.9	0.9	0.9	0.9	0.8	1.2	0.9	0.8
European Union-15	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.0
Transition Economies	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
Eastern Europe	-0.1	0.0	0.0	0.0	0.1	0.1	0.2	-0.1	0.1	0.2
Czech Republic	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2	0.0	0.0	0.2
Hungary	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Poland	0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.4
Former Soviet Union	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.2	0.0	0.2
Russia	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	-0.1
Ukraine	-0.4	-0.4	-0.3	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1
Other	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.5	0.7
Developing countries	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.8	1.6	1.5
Asia	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.5	1.4	1.2
East & Southeast Asia	1.2	1.1	1.1	1.0	1.0	0.9	0.9	1.3	1.0	0.8
China	1.0	0.9	0.9	0.8	0.7	0.7	0.7	1.1	0.8	0.6
Hong Kong	2.6	2.6	2.4	2.1	1.7	1.5	1.4	1.9	2.0	1.0
Korea	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.8
Taiwan	1.0	1.0	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.8
Indonesia	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.6	1.5	1.3
Malaysia	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.3	2.1	1.9
Philippines	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.3	2.1	1.8
Thailand	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.1	0.9	0.8
Vietnam	1.6	1.6	1.5	1.4	1.3	1.3	1.3	1.8	1.4	1.2
South Asia	1.9	1.9	1.9	1.8	1.8	1.8	1.7	2.0	1.8	1.6
India	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.9	1.7	1.5
Pakistan	2.7	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.5
Bangladesh	1.9	1.8	1.8	1.7	1.7	1.7	1.6	1.9	1.7	1.5
Latin America	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.8	1.5	1.3
Caribbean & Central America	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.5
Mexico	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.9	1.7	1.5
South America	1.6	1.6	1.5	1.4	1.4	1.3	1.3	1.7	1.4	1.2
Argentina	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Brazil	1.4	1.4	1.3	1.2	1.1	1.1	1.0	1.5	1.2	0.9
Other	1.9	1.9	1.8	1.8	1.8	1.7	1.7	2.0	1.8	1.6
Middle East	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.2
Iran	2.3	2.2	2.1	2.0	2.2	2.3	2.3	2.5	2.2	2.1
Iraq	2.5	2.8	2.9	3.0	3.0	2.9	2.9	2.2	2.9	2.8
Saudi Arabia	3.2	3.5	3.7	3.6	3.5	3.3	3.2	2.7	3.4	3.0
Turkey	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.6	1.5	1.3
Other	3.0	3.0	3.0	3.0	3.0	3.0	2.9	3.3	3.0	2.8
Africa	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.6	2.5
North Africa	2.0	2.0	1.9	1.9	1.9	1.8	1.8	2.1	1.9	1.7
Algeria	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.4	2.1	1.9
Egypt	2.0	1.9	1.9	1.9	1.8	1.8	1.8	2.1	1.8	1.7
Morocco	2.0	2.0	1.9	1.9	1.8	1.8	1.8	2.1	1.9	1.7
Tunisia	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.8	1.4	1.3
Sub-Saharan Africa	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.8	2.7
South Africa	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.2	2.0